

# A Cross-Cultural Study on Social Stratification in Psychological Resources — Sense of Control and Grit

Hye Won Kwon (University of Iowa)  
hyewon-kwon@uiowa.edu

# Outline

- Theoretical framework
- Key questions and hypotheses
- Method: Data, core variables, and analytic framework
- Contribution and potential implication
- Future plan

# Sense of Control and Grit

## Sense of Control

- The belief that a person can control over one's life outcomes (Mirowsky and Ross 1991, 1998, 2007; Ross and Mirowsky 2013).

## Grit

- "Passion and perseverance for a long-term goal" (Duckworth et al. 2007:1087).

## Why these two?

- Two components are both associated with better educational and occupational outcomes (Duckworth et al. 2007; Duckworth et al. 2011; Duckworth and Quinn 2009; Ross and Mirowsky 2013; You, Hong and Ho 2011).
- The link between grit and sense of control has been suggested by grit researchers.
- Adding grit into discussion of agency potentially enables us to understand multi-faceted characteristics of agency and contemplate on how the agentic belief actually get to operate in a way to increase chances to achieve better outcomes in one's life.

# The “Knowns”

## Social Psychology, Sociology, and Psychology

- People with advantaged positions show a higher level of the two psychological components—**sense of control** and **grit** (Duckworth et al. 2007; Duckworth et al. 2011; Duckworth and Quinn 2009; Mirowsky and Ross 1991, 1998, 2007).

## Cross-Cultural Approach

- Sense of agency is positively associated with achievement across cultures (Klassen 2004; You et al 2001; Smith et al. 1995).
- Substantial between-culture variance: people in Western countries tend to show a higher level of agency belief than East Asians (Klassen 2004).
  - Linking this finding to the individualistic vs. collectivistic orientations of cultures.

# The “Unknowns”

## Social Psychology, Sociology, and Psychology

- Examination of the “known” relationship between social structural positions and the sense of control or grit has been focused on a single nation.
- Dismiss the role of culture.



## Cross-Cultural Approach

- Tend to focus more on **the average differences** in the sense of control between Asians and Westerners.
- **NOT directly measure** cultural orientations (Klassen 2004)
- Largely ignore substantial within-cultural variation.

# Zooming in and out: key questions

- Examining both within-cultural variation and inter-cultural variation in psychological functioning.
- What is the relationship between one's social structural positions and agency-related psychological resources in different cultures?
  - Within-cultural variation: Do people with advantaged social positions tend to possess more psychological resources compared to those with lower social positions?
  - Inter-cultural variation

# Hypotheses

- H1) Different cultural orientations of the societies that a person resides in will be associated with different mean levels of the sense of control and grit.
  - Suggesting that culture provides a social milieu or sets a baseline of psychological functioning.
- H2) A person in a higher socioeconomic position within a society will be more likely to report a higher level of sense of control and grit than others, controlling for other variables.
  - Exploring within-culture variability.
- H3) The extent to which one's socioeconomic position influences one's sense of control and grit will vary across cultures.
  - Cultural dimensions will **moderate** the effect of socioeconomic positions.

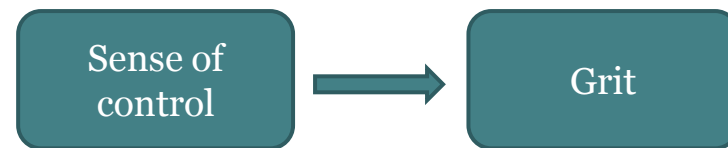
# Data and Core Variables

- **Data:** A cross-cultural project titled “Moral Schemas, Cultural Conflict, and Socio-Political Action (2014)”.
  - The U.S., France and Turkey.
  - Data collection in South Korea will be completed by November 2015.
- **Core variables**
  - ***Grit and sense of control***
    - Grit Scale (Duckworth and Quinn 2009)
    - Sense of Control Index (Mirowsky and Ross 1991)
  - ***Cultural orientation***
    - Inglehart’s materialist-postmaterialist value scales (Inglehart 1997; Inglehart and Baker 2002)
    - Schwartz’s Portrait Values Questionnaire (Schwartz 1994, 2006).
  - ***Structural positions***
    - ***Objective social structural positions***
      - Education, employment status, and household income
    - ***Subjective social structural positions***
      - Subjective perceptions about class

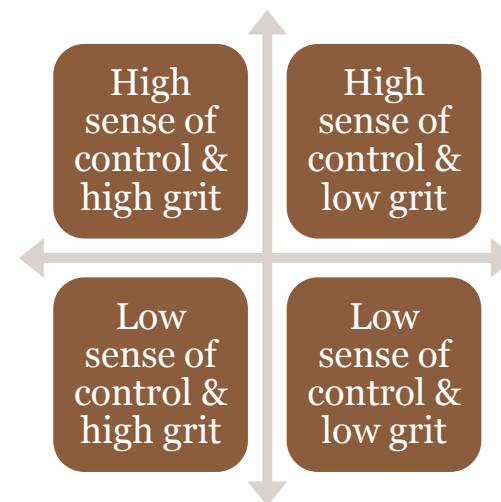


# Methods: Analysis and Modelling

1. Sense of control as a predictor of grit: sense of control can encourage individuals to possess gritty dispositions (Duckworth et al. 2007).
  - OLS regression



1. Configurations of the two beneficial psychological resources and how one's social locations are associated with those configurations.
  - Multinomial logistic regression



# Specific Contribution

1. Sense of control and grit have not been studied together despite the long suspicion that they might be closely associated with each other (Duckworth et al. 2007).
2. The focus of previous research has been mostly on the United States.
  - Bridges stratification research on psychological resources and the cross-cultural approach.
  - Provides a more integrative understanding of the mechanisms by which psychological components are developed, especially the extent to which socioeconomic factors shape the sense of control and grit in different countries that have different cultural orientations.

# Future Plan

- Literatures that examine both cultural and social structural effects on psychological functioning, if any.
  - A few empirical studies in psychology attempted a cross-cultural examination of the social class effect on psychological functioning such as attribution and cognition styles (e.g. Grossman and Varnum 2011 )
- Multilevel modeling, using WVS data (relative effects of social structure and culture)
- Structural equation modeling

**THANK YOU SO MUCH!**

# APPENDIX

# Grit and Sense of Control

- Grit as a correlate of the sense of control?
  - Grit “may be determined in part by beliefs about one’s capabilities, attributions of positive and negative events, and beliefs about the relative influence of external causes” (Duckworth et al. 2007:1100).
- The sense of control is more about a broader perspective toward life outcomes while grit is more closely related to actual behaviors.
- Adding grit into discussion of agency potentially enables us to understand how the sense of control practically operates.
  - mediation v.s. configuration

# Survey Question: Sense of Control

Table 1. The Sense of Control Index (Mirowsky and Ross 1991)

	Responsibility	Denying control*
Success	1) I am responsible for my own successes. 2) I can do just about anything I really set my mind to.	1) The really good things that happen to me are mostly luck. 2) There's no sense of planning a lot—if something good is going to happen it will.
Failure	3) My misfortunes are the result of mistakes I have made. 4) I am responsible for my failure.	3) Most of my problems are due to bad breaks. 4) I have little control over the bad things that happen to me.

\* Items in this column will be reverse coded.

- The translation of the items from English to target languages were conducted based on translation-back translation method (Smith 2004).

# Survey Question: Grit

- Taken from S-Grit scale (Duckworth and Quinn 2009)
  1. I finish whatever I begin.
  2. Setbacks don't discourage me.
  3. I often set a goal but later choose to pursue a different one. (Reverse coding)
  4. I have been obsessed with a certain idea or project for a short time but later lost interest. (Reverse coding)
- Scale ranges from “Very much like me” (1) to “Not like me at all” (5)
- The grit scale in French survey is the French grit scale that Duckworth lab provided and Grit scale in other surveys were translated by two bilinguals, based on translation-back translation method (Smith 2004).

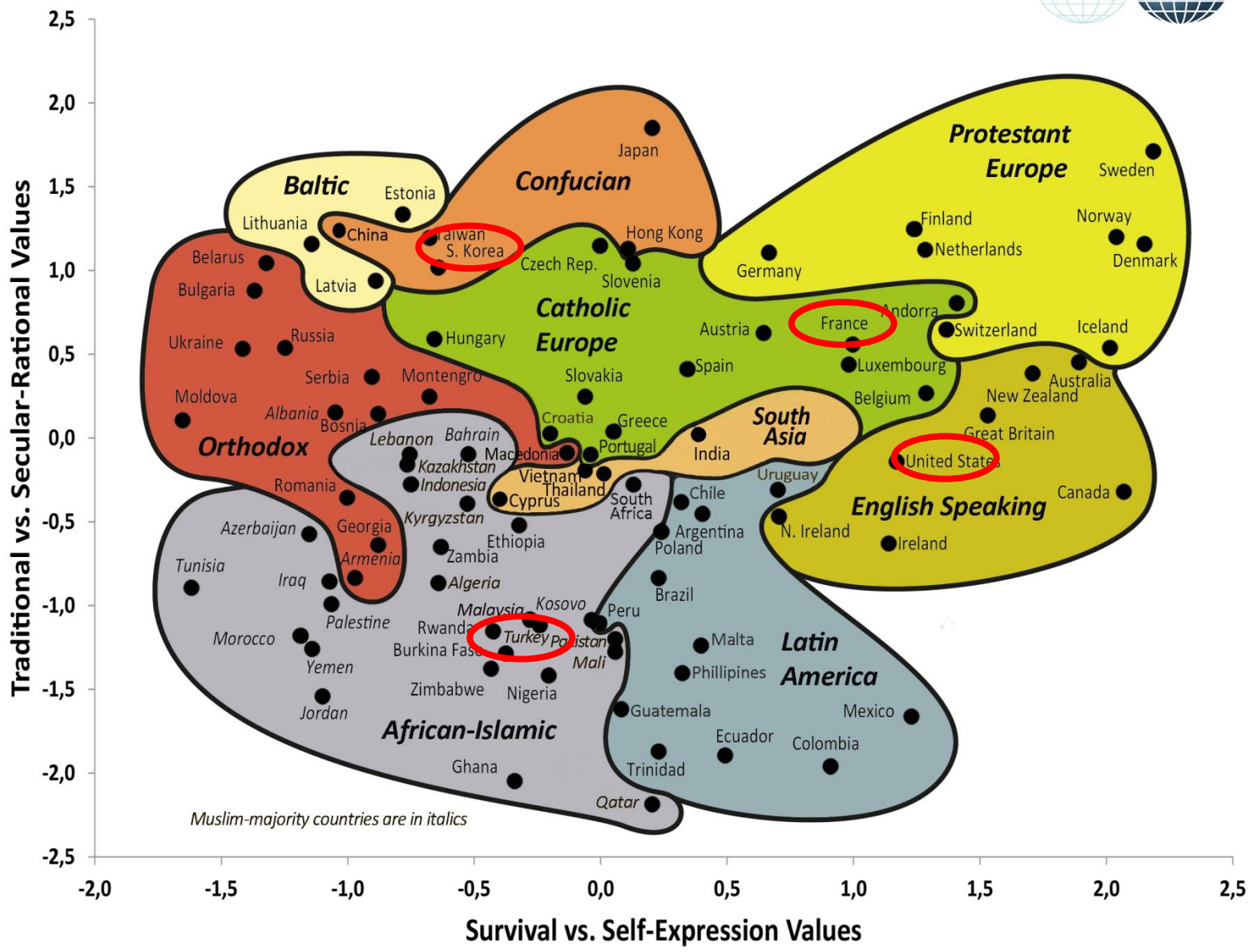


# Culture

- Rely on averaging approach, at the national level (e.g. Hofstede 1980; Schwartz 2006, 2014)
  - Cultural orientation at the individual level represents individual's standing in broader cultures.
    - e.g. Individual characteristic, a part of personality, or a part of manifestation of national culture in a broader sense (Hofstede 2011; Schwartz 2014).
- Draw a basic picture of the cultural effects on the mechanism in which social structural positions are linked to psychological resources, which will be very beneficial for extending this project to other nations in my future research.
- Another possible way of testing culture\*social structure:
  - The extent to which an individual endorses a certain cultural orientation (e.g. individualism or collectivism) will affect the effect of one's social structure on psychological resources.

# Other Variables

- Basic demographics such as age, gender, race/ethnicity, marital status, religiosity, and self-reported health
- National level variables such as GDP per capital (economic development), GNP (wealth), and Gini Index (economic inequality)



# Preliminary Analysis: A Midwestern University

Table 3. Regression of Grit on Socio-Demographics, Socioeconomic Status, and Sense of Control (N=583)

	Model 1	Model 2	Model 3
Age	0.001 (0.003)	0.002 (0.003)	0.003 (0.003)
Gender (1=Male)	0.042 (0.083)	0.047 (0.082)	-0.000 (0.081)
White	-0.024 (0.153)	-0.029 (0.150)	-0.032 (0.146)
Higher Education (1= MA and above)	0.170* (0.080)	0.189* (0.079)	0.183* (0.077)
Higher Income (1= \$80,000 and more)	0.139 (0.084)	0.149 (0.088)	0.084 (0.087)
Subjective Class Identification	-0.045 (0.077)	-0.067 (0.075)	-0.049 (0.074)
Married		-0.173* (0.083)	-0.154 (0.081)
Religiosity		0.167** (0.054)	0.157** (0.053)
Self-Rated Health		0.238*** (0.060)	0.191** (0.059)
Sense of Control			0.472*** (0.085)
Constant	4.015*** (0.238)	2.897*** (0.337)	2.672*** (0.331)
F	1.48	4.11	6.95
Adjusted R <sup>2</sup>	0.005	0.046	0.093

# Preliminary Analysis: national data

- Data from the U.S., France, and Turkey
- A small-to-moderate correlation between grit and the sense of control is commonly found in these countries (0.22 to 0.37).
  - Suggesting the majority of people are either high or low in both (approx. 60%) but the considerable size of people occupy off-diagonal positions in the grid.

US (N=425)			
		Sense of Control	
		High	Low
Grit	High	217 (51.1%) "HighSOC-HighGrit"	28 (6.6%) "LowSOC-HighGrit"
	Low	119 (28.0%) "HighSOC-LowGrit"	61 (14.4%) "LowSOC-LowGrit"

France (N=436)			
		Sense of Control	
		High	Low
Grit	High	154 (35.3%) "HighSOC-HighGrit"	87 (20.0%) "LowSOC-HighGrit"
	Low	82 (18.8%) "HighSOC-LowGrit"	113 (25.9%) "LowSOC-LowGrit"

Turkey (N=381)			
		Sense of Control	
		High	Low
Grit	High	154 (44.9%) "HighSOC-HighGrit"	97 (25.5%) "LowSOC-HighGrit"
	Low	41 (10.8%) "HighSOC-LowGrit"	72 (18.9%) "LowSOC-LowGrit"

# Preliminary Analysis: result

- Using a multinomial logistic regression, I found social structural indicators that are associated with having different combinations of the sense of control and grit vary across countries.
  - In the U.S., a **higher subjective class identification** distinguishes people with low on both **from** people with high sense of control regardless of their levels of grit.
  - However, in France, a **higher education** (MA or above) distinguishes people with low on both **from** gritty people regardless of their level of the sense of control.

This report was presented at the 5th LCSR International Annual Conference  
“Cultural and Economic Changes under Cross-national Perspective”.

November 16 – 20, 2015 – Higher School of Economics, Moscow, Russia.

<http://lcsr.hse.ru/en/conf2015>

Настоящий доклад был представлен на V ежегодной международной  
конференции ЛССИ «Культурные и экономические изменения в  
сравнительной перспективе».

16-20 ноября 2015 года – НИУ ВШЭ, Москва, Россия.

<http://lcsr.hse.ru/en/conf2015>